information. The Agency intends that owners and operators who submitted Part B applications subsequent to the date of enactment but prior to August 8, 1985 must also submit exposure information because section 3019(a) requires that beginning on August 8, 1985, *each* Part B application shall be accompanied by exposure information. A contrary interpretation would create a gap in the implementation of section 3019 by not requiring exposure information from owners and operators who submitted Part B's between the date of enactment and August 8, 1985. Such an interpretation would not be justifiable in light of the fact that all owners and operators who submitted Part B's prior to the date of enactment must submit exposure information by August 8, 1985.

F. Delisting Procedures

The new amendments add a paragraph (f) to section 3001, establishing specific criteria and procedures for delisting petitions. This subsection requires EPA to consider additional factors, such as constituents other than those for which the waste was listed, if the Administrator has a reasonable basis to believe that such additional factors could cause the waste to be a hazardous waste.

This provision is intended to eliminate what both Houses of Congress perceived as a defect in the standards used by EPA to evaluate delisting petitions. The Senate noted that, "[t]he Agency's practice has been to consider only the constituents given as the original justification for the Agency's decision to list a waste." S. Rep. No. 284, 98th Cong., 1st Sess. 33 (1983). This practice, however, does not ensure that wastes which are delisted are not hazardous. EPA often could have listed wastes for other constituents than those used as the basis for the listing and cited in Appendix VII of Part 261. A petitioner's waste could be non-hazardous with respect to the listed constituents, and exempted from regulation under recent EPA practices, yet still be hazardous due to constituents not considered. *Id.* (To the same effect, see H.R. Rep. No. 198, 98th Cong., 1st Sess. 57–58 (1983).) The amendments also require the Administrator to provide notice and an opportunity for comment on the additional factors considered before granting or denying a petition.

The statute forbids the granting of any new temporary exclusions without notice and comment as is currently permitted by § 260.22(m) of EPA's regulations, since the statute calls for notice and comments on all petitions evaluated after enactment of the amendments.[24] A provision in an earlier version of the House bill permitting the continued issuance to temporary exclusions, if notice and comment was provided, was eliminated from the final legislation. See H.R. Rep. No. 198, at 13, 58.

The amendments further set deadlines for Agency action on all future petitions received. To the maximum extent practicable, the Agency must propose a decision within twelve months of receiving a complete application[25] and grant or deny a petition within twenty-four months. Unlike the self-executing elimination of previously granted temporary exclusions noted below, this provision does not mean that the petitions are granted by operation of the statute if the Agency has not acted within the time limits specified.

The statute also places a time limit on the effectiveness of any temporary exclusions granted before its enactment. Beginning 24 months after enactment, wastes covered by a petition granted such a temporary exclusion no longer will be exempted from RCRA regulations, unless a final decision granting or denying the petition, after notice and comment, has been issued. This provision reflects the desire of Congress to eliminate the possibility that a delisting petition will be temporarily granted, without notice or an opportunity for comment, and then not reviewed for a final determination within a reasonable time. See, e.g., S. Rep., *supra*, at 33.

The new delisting standard and the need for notice and comment require a number of regulatory changes. The Agency has changed the substantive standard on which delisting petitions are reviewed to conform to the statutory mandate. In addition, today's regulation eliminates the temporary exclusion provision in the Agency's regulations.

[24] The Agency believes that the statute prohibits temporary exclusions as previously granted by EPA (i.e., exclusions, without notice and comment, based on a substantial likelihood that a petition eventually would be granted). Exclusions still may be granted, however, without notice and comment if the requirements of the good cause exception, 5 U.S.C. § 553(b)(3)(B), are met.

[25] A complete application includes both the original submission by the petitioner and any subsequent information requested by EPA in order to determine whether the waste contains any additional constituents which could cause it to be a hazardous waste. Congress required the Agency to consider, under certain circumstances, factors other than those for which the waste was listed. EPA does not believe that Congress would have expected the Agency to make this determination without adequate information. EPA therefore concludes that the time limits incorporated in the amendment begin to run only after the Agency has received all information necessary to determine whether the waste is hazardous.

1. The New Substantive Standard

The primary change in 40 CFR 260.22 made in this regulation is to modify the substantive standard on which delisting petitions are evaluated, in accordance with the statute. The current regulation requires that the petitioner demonstrate to the satisfaction of the Administrator that the waste produced does not meet any of the criteria under which the waste was listed and notes that a waste so excluded still may be a hazardous waste if it fails any of the characteristics in Subpart C of Part 261 (40 CFR 260.22(a)). Today's regulation retains these provisions, but requires in addition that, before a waste may be excluded, the Administrator determine that the waste does not satisfy any factors other than those for which the waste was listed or that there is no reasonable basis to believe that such additional factors could cause the waste to be hazardous. This provision codifies the two-prong test mandated by the amendments, i.e., the Agency must consider both the factors for which the waste was listed (in all cases) and the factors and constituents other than those for which the waste was listed (in cases where the Administrator has a reasonable basis to believe that these additional factors could cause the waste to be hazardous).

2. No New Temporary Exclusions

The regulation eliminates the provision authorizing temporary exclusions, which were issued without prior notice and comment when the Administrator found that there was a substantial likelihood that an exclusion would be granted. 40 CFR 260.22(m). Dissatisfaction with the lack of notice and comment was a major impetus for the revision of the delisting procedures. *See*, e.g., S. Rep., *supra*, at 33.

Today's regulation require notice and an opportunity for comment before a delisting may be granted.[26] The statute mandates notice and an opportunity for comment on the additional factors (including additional constituents) which the Agency now must consider, before granting or denying a petition. EPA regulations already require notice and comment for petitions, other than temporary exclusions. *See* 40 CFR 260.20. These provisions applied to petitions which addressed only the

[26] The Agency believes that the statute does not prohibit use of the APA provision permitting final agency action without notice and comment if there is good cause. See 5 U.S.C. 553(b)(3)(B). There is no suggestion in the language of the amendment or the legislative history that Congress meant to overrule the APA. These regulations also permit the Agency to use the good cause exception.

constituents for which the waste was listed. Congress wanted to ensure that notice and comment would continue to be required for the expanded petitions, addressing not only the listed constituents, but any additional constituents as well. The Agency concludes that the Act mandates notice and comment for all petitions, and for the entire petition, and the regulation so provides.

G. Research, Development, and Demonstration Permits

The HSWA adds section 3005(g) which provides EPA with authority to issue permits for research, development, and demonstration treatment activities. The amendment grants EPA authority to issue permits independent of existing regulations relating to hazardous waste treatment processes. EPA is directed to include certain provisions in each permit as well as any other requirements deemed necessary to protect human health and the environment. With several exceptions, the amendment also allows waiver or modification of the permit application and permit issuance requirements of the general permit regulations.

EPA has codified this new authority in § 270.65 of its regulations. This regulation has four basic provisions.

Paragraph (a) of the regulation authorizes the Administrator to issue RD&D permits for innovative and experimental treatment technologies or processes for which permit standards have not been established under Part 264 or 266. The regulation authorizes the Administrator to establish permit terms and conditions for the RD&D activities as necessary to protect human health and the environment. The statutory amendment allows the Administrator to select the appropriate technical standards for each RD&D activity to be permitted. EPA is required to address construction (if appropriate), limit operation for not longer than one year, and place limitations on the waste that may be received to those types and quantities of wastes deemed necessary to conduct the RD&D activities. The permit must include the financial responsibility requirements currently in EPA's regulations and other such requirements as necessary to protect health and environment. Other possible requirements include, but are not limited to, provisions regarding monitoring, operation, closure, remedial action, and testing and providing information. EPA may decide not to permit an RD&D project if it determines that the project, even with restrictive permit terms and conditions, may threaten human health and environment.

Paragraph (b) provides that the Agency will generally follow the permitting procedures of Parts 124 and 270. As authorized, EPA reserves the right to waive or modify these procedures to expedite permitting as long as human health and the environment are protected. However, EPA will not waive the public participation procedures of Part 124 established under § 7004(b)(2) of RCRA, nor will EPA waive the financial responsibility requirements currently in EPA regulations.

Paragraph (c) implements the statutory provision that authorizes the Administrator to order an immediate cessation of any operations at the facility if necessary to protect human health or the environment.

Under paragraph (a) and the statutory amendment, permits are initially to be issued for a maximum period of one year of operation. The legislative history provides that the permit is to be issued for a maximum of 360 days of operation. The 360-day time period does not refer to calendar days, to periods of construction, or to operation using materials other than hazardous waste. (*See* 129 Cong. Rec. H8160 (daily ed. October 6, 1983.) The permit may be renewed up to three times for periods of not more than one year of operating days as provided in paragraph (d). EPA has also amended § 270.10(a) to provide that procedures for issuing and administering RD&D permits are governed exclusively by § 270.65.

Congress made clear that RD&D permits could cover a variety of experimental activities, but suggested several limitations on EPA authority. The legislative history provides three examples of the types of RD&D activities which may be covered by this section. [*See* 129 Cong. Rec. H88160 (daily ed. October 6, 1983)]. First, a common experiment involves an individual or company who has designed on paper or in the laboratory an innovative treatment system for hazardous waste. In order to determine whether this new technology is technically feasible, a small pilot-scale unit may be constructed and operated for purposes of evaluation. If this is successful, a larger but still pilot-scale, experimental unit may be constructed to demonstrate the reliability, economic feasibility, and environmental impacts of the process.

A second type of hazardous waste management experiment involves an equipment vendor and a waste-generating or processing customer. Vendors often custom prepare storage and processing equipment, that is, tanks, incinerators, etc., based on a customer's individual needs, and this may require one or more tests with a pilot facility using samples of the customer's waste. And third, a manufacturer or user of a particular commercial treatment process may want to improve its efficiency or effectiveness or reduce environmental impacts. This may involve the construction of a pilot-scale treatment unit that will be operated in an experimental mode to test new wastes or alternate operating conditions. This list of examples is not an exclusive list of the activities that may be permitted.

Congress also explained how it expected EPA to operate in issuing RD&D permits. Under this section, EPA may permit (1) treatment technologies, processes, methods, or devices that are innovative and experimental (2) for the sole purpose of gathering information to evaluate their technical or economic feasibility. These factors are discussed below.

First, innovative and experimental treatment technologies or processes intended to be covered by this section at a minimum include experimentation and demonstration with technologies that have never been utilized in commercial application, as well as further refinement and development or performance testing of technologies that, in some form, have been operated in a commercial capacity.

Second, under a permit, EPA may allow the experimental treatment activities and associated storage. Such permits will not authorize disposal of hazardous waste. The disposal of hazardous waste must occur at a facility which has received a RCRA permit under Part 264 or which has interim status. RD&D permits may only be issued for the purpose of demonstration or evaluation of the economic or technical feasibility of a particular treatment technology, process, method, or device and associated storage. If the waste management activity related to the technology, unit, process, or device is used at any time to store or treat waste for any reasons other than the conduct of a treatment experiment, it must be permitted and operated in accordance with all applicable sections of 40 CFR Parts 264 and 266. *Id.*

H. State Authorization

HSWA made several significant changes regarding the authorization and implementation of State hazardous waste programs. Part 1 of this section discusses the new, dual State-Federal regulatory program in authorized States and some conforming changes to the State authorization regulations in Part

271 necessitated by the HSWA. Part 2 discusses section 3006(f), a new provision requiring authorized States to make information about hazardous waste facilities available to the public to the same extent that EPA would make the same information publicly available. Part 3 discusses the extension of the expiration date for interim authorization under the 1976 RCRA. Prior to the HSWA, responsibility for the RCRA program in a State with interim authorization would have reverted to EPA on or before January 26, 1985 if the State had not yet obtained final authorization. Part 4 discusses the new type of interim authorization under the HSWA and the requirements States must meet to obtain and retain final authorization ("moving target" and program revisions).

The preamble to the proposed rule to be published as a companion to this rule addresses additional issues pertaining to State authorization under the HSWA. Both preambles should be read together.

1. Applicability of Today's Rule in Authorized States

New section 3006(g) of RCRA provides that any requirement or prohibition which is applicable to the generation, transportation, treatment, storage, or disposal of hazardous waste and which is imposed under the 1984 Amendments shall take effect in each authorized State on the same date as such requirement or prohibition takes effect in non-authorized States. The Administrator is directed to carry out such requirements or prohibitions directly in an authorized State until the State is granted authorization to do so. This includes the authority to issue or deny permits or portions of permits where the State is not yet authorized to implement the requirements and prohibitions established by the amendments. (Section 227.)

These amendments dramatically alter the existing Federal-State relationship under section 3006 of RCRA. Before the amendments, pursuant to sections 3006(b) or 3006(c), States with final authorization or all phases of interim authorization administered their hazardous waste program entirely in lieu of EPA. Changes to the Federal Subtitle C program did not take effect automatically in such States; States needed to revise their programs to include those changes and receive EPA's approval. Further, EPA could not issue permits for any facilities covered by the State permitting program which EPA had approved. *See* 40 CFR 264.1(f), 271.1(f), 271.121(f).

In contrast, the new amendments create a dual regulatory system in authorized States. Because of new section 3006(g), the requirements and prohibitions stemming from the amendments take effect immediately in all States, regardless of any less stringent State statute, regulation, or permit. For example, even though a facility may now hold a State RCRA permit allowing it to dispose of bulk liquid waste in a lined landfill, RCRA prohibits it from doing so after May 8, 1985. (See section V.A.1. of preamble.) And, even though authorized States have previously promulgated their permit application requirements, facilities in all States will have to comply with new Federal permit application requirements in Part 270.

EPA reviewed today's rule to determine which provisions in it are "requirements or prohibitions" that are applicable to the generation, transportation, treatment, storage, or disposal of hazardous waste. EPA concluded that all of the provisions in the rule are requirements or prohibitions. They therefore take effect in authorized States and are Federally enforceable.

The Agency started its analysis with the Conference Report which specified that certain requirements and prohibitions should take effect immediately in all States. (130 Cong. Rec. H11134 (daily ed. Oct. 3, 1984).) With the exception of the "liquids in landfills" provision, these provisions were in the Senate version of the HSWA and appear in 3001(d)(3), (5), 3004(c), (1), (o), (r), (u), 3005(c)(3), 3007(e)(1), 3015, and 7010, as enacted. In addition, EPA concluded that the household waste exclusion in section 3001(i), the delisting procedures in section 3001(f), the requirements concerning corrective action and ground-water monitoring in sections 3004(p), (v), 3005(i), the prohibition concerning salt domes in section 3004(b), the ban on hazardous waste in cement kilns in section 3004(q)(2)(C), the requirement for health assessments in section 3019, the preconstruction ban in section 3005(a), the termination of interim status and extension of interim status requirements in section 3005(e), and the waste minimization requirements in section 3002(a)(6), (b) and 3005(h) are requirements and prohibitions. EPA also concluded that the requirements concerning hazardous waste exports in section 3017(g) were requirements concerning the generation and transportation of hazardous waste.

Finally, the Agency analyzed the statute to determine whether EPA's authority to issue research and development permits under section 3005(g) is a requirement concerning the treatment of hazardous waste. In doing so, EPA considered whether section 3005(g) is the type of provision that Congress would have wanted EPA to be able to implement directly in authorized States pursuant to section 3006(g). EPA concluded that section 3005(g) was intended to be implemented by EPA in the case of an authorized State which does not have State legal authority to issue permits to these types of facilities. While the language in section 3005(g) is discretionary ("The Administrator may issue a research, development, and demonstration permit * * *"), EPA does not believe that Congress, in amending the statute to encourage new and innovative technologies and to allow permitting before section 3004 standards are developed, intended to preclude the issuance of permits to research and development facilities in authorized States.

Thus, pursuant to 3005(g) and 3006(g), EPA is able to issue a research and development permit, in consultation with the State, to encourage development of the innovative technology. However, as discussed next, an EPA permit could not override more stringent State requirements governing the facility or precluding its construction or operation without a State permit.

Some of these new requirements and prohibitions provide for variances and exclusions. For example, exemptions from liner and ground-water monitoring requirements are available under certain conditions. *See, e.g.*, § 264.90(b)(2), § 264.221(d). In addition, facilities constructed to incinerate PCBs pursuant to EPA's approval under section 6(e) of the Toxic Substances Control Act are exempted from the preconstruction ban in new 40 CFR 270.10(f)(1). See section 3005(a) of RCRA, as amended.

The Agency considered whether a variance or exclusion from such a requirement was itself a "requirement" or "prohibition" of the Act. EPA concluded that the entire provision on a subject matter—such as minimum technological requirements—should be treated as the "requirement" or "prohibition" since all the subparts are related. However, section 3009 of RCRA and existing 40 CFR 271.1(i) and 271.121 provide that nothing in RCRA prohibits States, political subdivisions, or localities from imposing more stringent requirements than those in EPA's RCRA regulations. Thus, any State or local requirement that is more stringent than a requirement or prohibition in today's rule remains in effect under State or local law.

As a practical matter, this means that facilities in authorized States may not

be able to benefit from the Federal exclusions and variances as would facilities in non-authorized States unless and until the authorized State amends its more stringent regulations or enabling authority. That result is compelled by the Act; nothing in the amendments or legislative history suggests any Congressional intent to override section 3009 or preempt more stringent State requirements. Thus, the universe of the more stringent provisions in the authorized State program and today's rule defines the applicable requirements. Each member of the regulated community must familiarize himself with both the State and Federal regulations to be assured that he is in compliance with all applicable requirements. EPA may enforce any violation of the authorized State program, the HSWA, or today's rule; a State may, of course, enforce violations of its requirements regardless of authorization status.

The Agency also wishes to emphasize that future regulations implementing the requirements and prohibitions in the HSWA will take effect in authorized States at the same time that they take effect in non-authorized States. For example, EPA may publish additional regulations further defining the double liner requirement in today's rule. Even though a State may receive authorization for today's double liner requirements, any new EPA regulation on double liners will be applicable in that State until the State receives authorization for the newly-amended double liner requirement. Thus, a State's authorization status may change in response to further implementation of the HSWA. The Federal Register notices promulgating new requirements will explain their applicability in authorized States.

EPA has made various changes to Part 271 to reflect EPA's new authority in authorized States. In § 271.1(a), a reference to section 3006(f) of RCRA has been added since a new State authorization requirement appears in section 3006(f). Sections 271.1(f), 271.19, 271.121(f), and 271.134 have been amended to reflect the Administrator's new authority under sections 3006(c) and (g) to issue permits in authorized States. Without these changes the regulations would continue to prohibit EPA from permitting facilities in authorized States.

A new section, 271.1(j), has been added to identify the Federal program requirements and prohibitions that are promulgated or take effect pursuant to HSWA. The Agency determined that it was extremely important to clearly specify which EPA regulations implement HSWA since these requirements are immediately effective in authorized States. These HWSA provisions also impact whether interim or final authorization is available to States as discussed in detail in following sections of this preamble. Therefore, the Agency is creating a table in § 271.1(j) that lists the HSWA regulations promulgated to date (specifically, the January 1985 dioxin waste listing and today's final codification rule). Future regulations promulgated under the authority of the HSWA will be added to the table in § 271.1(j).

Sections 271.3(a) and 271.121(c)(3) have been amended to reflect section 3006, as amended by the HSWA, and section 3009. They now describe the respective Federal and State roles in administering Subtitle C and indicate that all of the HSWA requirements identified in § 271.1(j) take immediate effect in authorized States. In addition, § 271.24 and § 271.136 have been added, and § 271.21(e)(1)(i) and § 271.121(a) amended, to refer to the availability of interim authorization under the HSWA.

EPA also amended §§ 264.1(f) and 265.1(c)(4) to clarify that the regulatory modifications to Parts 264 and 265 made by today's rule apply to the regulated community in authorized States until a State receives authorization to carry out the new requirements. This change is necessary to reflect section 3006, as amended, and is consistent with the other amendments to Part 271.

2. Public Availability of Information

Section 3006(f) provides that information obtained by authorized States regarding facilities and sites for the treatment, storage, and disposal of hazardous waste must be made available to the public in substantially the same manner, and to the same degree, as would be the case if EPA were carrying out the RCRA program in the State. Previous to the HSWA, the only EPA requirement in this area was that the name and address of a permit applicant could not be withheld from the public. *See* 40 CFR 270.12(b); 271.14(f).

Initially, EPA has interpreted "in substantially the same manner" in section 3006(f) to refer to the procedures EPA employs in deciding how and when to release information under the Freedom of Information Act (FOIA), 5 U.S.C. 552. EPA has interpreted "to the same degree" to refer to the type and quantity of information that is released under EPA's FOIA regulations. Further, the Agency has concluded that information regarding facilities and sites would at least cover information relating to permitting, compliance, and enforcement, and inspection reports gathered under section 3007 of RCRA (and a State analogue). Section 271.17(c) has been amended to address section 3006(f).

EPA's procedural and substantive regulations implementing FOIA and governing the treatment of confidential business information are set forth in 40 CFR Part 2. Any State requirements which are equivalent to those regulations will satisfy section 3006(f). While the use of "substantially the same manner" in section 3006(f) seems to offer the opportunity for greater flexibility than an equivalent standard, EPA has not had the opportunity to identify whether different standards are feasible. Thus, today's final rule does not go beyond the statutory language, thereby allowing case-by-case judgments about whether a State has satisfied section 3006(f).

Another issue concerns the effective date of the section 3006(f) requirements. The HSWA does not clearly indicate whether a State may receive final authorization after the date of enactment if its application does not demonstrate equivalence to section 3006(f). Section 3006(f) could be read as requiring any State which did not receive final authorization by the date of enactment to demonstrate compliance with the new requirement in order to be authorized. EPA rejects that reading because the Agency believes it is inconsistent with the statute as a whole and the legislative intent.

Section 225 of the amendments specifically amended section 3006(b) to allow the Administrator to authorize a State program that is not fully equivalent to the Federal program. That amendment was intended to assure that last minute changes to the Federal program which the State did not have time to adopt would not prevent an otherwise qualified State from obtaining final authorization. Further, the Conference Report, while ambiguous, does stress the need to allow States sufficient time to amend their programs to implement section 3006(f). 130 Cong. Rec. H11134 (daily ed. Oct. 3, 1984). The Report, in fact, specifically refers to EPA's regulations in 40 CFR 271.21(e) concerning the phase-in of new Federal requirements.

Accordingly, EPA concludes that States now applying for final authorization are not legally required to have an analogue to section 3006(f)(1). Such States, and States which have already received final authorization without demonstrating compliance with section 3006(f), are required to revise their programs to demonstrate